

Chris Thomas of Lantz-Boggio Architects provides the following answers to the questions below, regarding the Low Voltage systems for Pioneer Manor.

Question from GC:

Can you confirm with the owner on what special systems they are providing? We only have specs for Div 26,28 and data/cable T.V.

The following is the list of special system plan sheets that I am unsure of who is providing.

1. E0.18 Wireless System
2. E0.19 Closed Circuit T.V.
3. E0.20 Nurse Call
4. E0.21 Public Address
5. E0.22 Building Access Control

The plan sheets above don't have any specs or devices listed on any of them, but they do say that we are to include in our scope.

If we are to include the special systems listed above we would need the full specs on each system and a lay-out of all the devices for each system. If the owner is going to provide these systems, do we need to rough- in each location? If yes, than we need device locations for each system.

Answers:

A) Telephone / data system: General Contractor to furnish and install per dwg "E0.16"

B) Cable TV system: General Contractor to furnish and install per dwg "E0.17"

C) WiFi: General Contractor to provide the following:

Provide two wireless local area network infrastructure throughout the entire facility. One is for the residents and visitors, and one is for the staff. There will be a POE wireless access point (WAP) for each system every 50 ft thru all corridors and corridors and no more than 25 ft from the end of the corridor.

Include an additional 30 locations in open space areas. From each WAP for each system route a Cat "6" cable to the nearest tele/com room and terminate in a dedicated patch panel. At each WAP point include a 1 gang flush in the ceiling plaster ring to which the unit can be mounted to. The owner will provide all WAP equipment and the contractor to make all connections and install the units.

- D) Closed CKT TV the system is a POE type. The Owner will furnish and install all cameras, CAT 6 cables, terminations, equipment , monitors etc. General Contractor to provide all power in tele/data rooms. General Contractor to furnish and install (12) exterior flush in the bldg wall 4”sq x 2”d j-box with 1 gang plaster ring and 40 ft of conduit to an accessible point above the corridor ceiling. General Contractor to furnish and install (26) corridor plaster rings for interior camera locations.
- E) Nurse Call System: Owner to furnish and install the Nurse Call System; this is a hardwired system. Contractor to furnish and install 170 4”sq x 2”d box with 1 gang plaster ring and a ¾”conduit (30 ft) stubbed into the corridor to an accessible ceiling location. System has 200 dome lights; GC to provide 2 gang plaster ring mounted in the ceiling. There are 320 pull cord location; GC to provide 4 x sq x 2 gang ring plus a ¾” conduit (30ft each) into corridor into an accessible ceiling location. Contractor to provide all power in tele/data rooms
- F) Wander Management system: Contractor to include a 4”sq x 2” j-box with a 1-gang plaster ring and a ¾” conduit (10ft) stub up at 45 doors.
- G) PA system; General Contractor to furnish and install; the locations are shown on drawing “e0.18” . The system is a POE system; Contractor to include a 2’x4” layin ceiling tile with speaker unit in locations as shown. Include all required headend equipment and controls and (20) local speaker volume control units. All devices are wired with cat “6” cable.

Paging speaker shall be IP based, and powered via POE. Speaker should include integrated talk back microphone, that allows for full duplex communications. Speaker shall be able to integrate and register via SIP to a Cisco Call Manager server, for full duplex talk back capabilities. Speaker shall include 8 inch speaker with microphone and integrated mounting of 2x2 tile hardware for drop in grid replacement of existing tiles in ceiling.

Each individual unit shall be capable of producing sound masking programmatically, as requested without the need for outboard sound generation or software for control.

IP Speaker should be cross compatible to allow for software based network control, for potential future expansion, and easy upgrade of firmware.

Supported protocols must include:

- SIP
- IPv4
- HTTP
- SLP

- TFTP
- NTP
- DHCP
- IGMP
- ICMP
- TCP/IP
- UDP
- MDNS & MDNS-SD

Specifications as follows:

- Weight: 6.5 lbs
- Approx: 2'x3"x2'
- POE (IEEE802.3af)
- POE+ (IEEE802.3at)
- 10/100 Mb network connection

H) Building access control system: The General Contractor to include a 4"sq x 2"d j-box with a 1 gang plaster ring and a 3/4"conduit (10ft) up at 48 box locations and stub into the accessible ceiling location.

I) Power: Contractor to include an allowance for (5) 20a, 120v dedicated circuits with 100ft of conduit and wire.